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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/033,340	12/26/2001	Boon Suan Jeung	108298631US	7237

25096 7590 05/22/2003

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EXAMINER

TRAN, MAI HUONG C

ART UNIT PAPER NUMBER

2818

DATE MAILED: 05/22/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/033,340

Applicant(s)

JEUNG ET AL.

Examiner

Mai-Huong Tran

Art Unit

2818

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 December 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-96 is/are pending in the application.
- 4a) Of the above claim(s) 1-49 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 50-96 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2,3,6.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Election/Restriction

Application's election without traverse of Group I (Claims 50-96) in Paper No. 5 drawn to a semiconductor device is acknowledged for prosecution in the subject application. Accordingly, claims 1-49 are withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

Applicants have the right to file a divisional application covering the subject matter of the non-elected claims.

Claim Rejections - 35 U.S.C. § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 50-96 are rejected under 35 U.S.C. 103 (a) as being unpatentable over U.S. Patent No. 6,396,975 to Wood et al. in view of Dalal et al. (6,344,234).

Regarding to claim 50, Wood discloses a microelectronic device package comprising a first microelectronic substrate 12 having a first surface and further having a second surface facing opposite the first surface; a second microelectronic substrate 20 having a first surface and further having a second surface facing opposite the first surface, the second microelectronic substrate being coupled to the first microelectronic substrate to form a substrate assembly with the second surface of the second microelectronic substrate facing toward the first surface of the first microelectronic substrate; and a conformal conductive link 146 coupled between the first and second connection sites, the conductive link 146 conforming at least generally to a contour of the substrate assembly immediately adjacent to the conformal conductive link as set forth in col. 12, lines 3-67, col. 13, lines 1-65, figs. 7a, 9c.

Wood does not disclose a first microelectronic substrate having a first surface with a first connection site and a second microelectronic substrate having a first surface with a second connection site. Dalal teaches a connection site 12 as set forth in col. 6, lines 3-7, fig. 1.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to form a substrate with a connection site, as taught by Dalal in order to provide for a semiconductor module that is low cost, easy to build and has a high process yield (col. 4, lines 26-28).

Claim 51 is rejected under the same rationale set forth above to claim 50.

Claim 52 is rejected under the same rationale set forth above to claim 50.
Claim 53 is rejected under the same rationale set forth above to claim 50.
Claim 54 is rejected under the same rationale set forth above to claim 50.
Claim 55 is rejected under the same rationale set forth above to claim 50.
Claim 56 is rejected under the same rationale set forth above to claim 50.
Claim 57 is rejected under the same rationale set forth above to claim 50.
Claim 58 is rejected under the same rationale set forth above to claim 50.
Claim 59 is rejected under the same rationale set forth above to claim 50.
Claim 60 is rejected under the same rationale set forth above to claim 50.
Claim 61 is rejected under the same rationale set forth above to claim 50.
Claim 62 is rejected under the same rationale set forth above to claim 50.
Claim 63 is rejected under the same rationale set forth above to claim 50.
Claim 64 is rejected under the same rationale set forth above to claim 50.
Claim 65 is rejected under the same rationale set forth above to claim 50.
Claim 66 is rejected under the same rationale set forth above to claim 65.
Claim 67 is rejected under the same rationale set forth above to claim 65.
Claim 68 is rejected under the same rationale set forth above to claim 65.
Claim 69 is rejected under the same rationale set forth above to claim 65.
Claim 70 is rejected under the same rationale set forth above to claim 65.
Claim 71 is rejected under the same rationale set forth above to claim 65.
Claim 73 is rejected under the same rationale set forth above to claim 65.

Claim 74 is rejected under the same rationale set forth above to claim 50.
Claim 75 is rejected under the same rationale set forth above to claim 74.
Claim 76 is rejected under the same rationale set forth above to claim 74.
Claim 77 is rejected under the same rationale set forth above to claim 74.
Claim 78 is rejected under the same rationale set forth above to claim 74.
Claim 79 is rejected under the same rationale set forth above to claim 74.
Claim 80 is rejected under the same rationale set forth above to claim 74.
Claim 81 is rejected under the same rationale set forth above to claim 74.
Claim 82 is rejected under the same rationale set forth above to claim 74.
Claim 83 is rejected under the same rationale set forth above to claim 74.
Claim 84 is rejected under the same rationale set forth above to claim 50.
Claim 85 is rejected under the same rationale set forth above to claim 84.
Claim 86 is rejected under the same rationale set forth above to claim 84.
Claim 87 is rejected under the same rationale set forth above to claim 84.
Claim 88 is rejected under the same rationale set forth above to claim 84.
Claim 89 is rejected under the same rationale set forth above to claim 84.
Claim 90 is rejected under the same rationale set forth above to claim 84.
Claim 91 is rejected under the same rationale set forth above to claim 84.
Claim 92 is rejected under the same rationale set forth above to claim 84.
Claim 93 is rejected under the same rationale set forth above to claim 50.
Claim 94 is rejected under the same rationale set forth above to claim 93.


Claim 95 is rejected under the same rationale set forth above to claim 93.

Claim 96 is rejected under the same rationale set forth above to claim 93.

Conclusion

Any inquiry concerning this communication on earlier communications from the examiner should be directed to Mai-Huong Tran, (703) 305-1958. The examiner can normally be reached on Monday-Thursday from 8:00 AM to 6:30 PM. The examiner's supervisor, David Nelms can be reached on (703) 308-4910.

The fax phone number for the organization where this application or proceeding is assigned is (703) 308-7724. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.


Mai-Huong Tran


HOAI HO
PRIMARY EXAMINER